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\* \* \* \* \* Welcome to STN International \* \* \* \* \*

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NEWS	2	"Ask CAS" for self-help around the clock
NEWS	3 May 12	EXTEND option available in structure searching
NEWS	4 May 12	Polymer links for the POLYLINK command completed in REGISTRY
NEWS	5 May 27	New UPM (Update Code Maximum) field for more efficient patent SDIs in CPlus
NEWS	6 May 27	CPlus super roles and document types searchable in REGISTRY
NEWS	7 Jun 28	Additional enzyme-catalyzed reactions added to CASREACT
NEWS	8 Jun 28	ANTE, AQUALINE, BIOENG, CIVILENG, ENVIROENG, MECHENG, and WATER from CSA now available on STN(R)
NEWS	9 Jul 12	BEILSTEIN enhanced with new display and select options, resulting in a closer connection to BABS
NEWS	10 Jul 30	BEILSTEIN on STN workshop to be held August 24 in conjunction with the 228th ACS National Meeting
NEWS	11 AUG 02	IFIPAT/IFIUDB/IFICDB reloaded with new search and display fields
NEWS	12 AUG 02	CPlus and CA patent records enhanced with European and Japan Patent Office Classifications
NEWS	13 AUG 02	STN User Update to be held August 22 in conjunction with the 228th ACS National Meeting
NEWS	14 AUG 02	The Analysis Edition of STN Express with Discover! (Version 7.01 for Windows) now available
NEWS	15 AUG 04	Pricing for the Save Answers for SciFinder Wizard within STN Express with Discover! will change September 1, 2004
NEWS	16 AUG 27	BIOCOMMERCE: Changes and enhancements to content coverage
NEWS	17 AUG 27	BIOTECHABS/BIOTECHDS: Two new display fields added for legal status data from INPADOC
NEWS	18 SEP 01	INPADOC: New family current-awareness alert (SDI) available
NEWS	19 SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS	20 SEP 01	New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
NEWS	21 SEP 14	STN Patent Forum to be held October 13, 2004, in Iselin, NJ
NEWS EXPRESS	JULY 30	CURRENT WINDOWS VERSION IS V7.01, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
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NEWS INTER		General Internet Information
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:45:38 ON 21 SEP 2004

=> file medline, agricola, caba, caplus, biosis, biotechno		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'MEDLINE' ENTERED AT 15:45:54 ON 21 SEP 2004

FILE 'AGRICOLA' ENTERED AT 15:45:54 ON 21 SEP 2004

FILE 'CABA' ENTERED AT 15:45:54 ON 21 SEP 2004

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FILE 'CAPLUS' ENTERED AT 15:45:54 ON 21 SEP 2004

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FILE 'BIOSIS' ENTERED AT 15:45:54 ON 21 SEP 2004

Copyright (c) 2004 The Thomson Corporation.

FILE 'BIOTECHNO' ENTERED AT 15:45:54 ON 21 SEP 2004

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=> s (arntzen, c? or arntzen c?)/au  
L1 851 (ARNTZEN, C? OR ARNTZEN C?)/AU

=> s (lam, d? or lam d?)/au  
L2 1713 (LAM, D? OR LAM D?)/AU

=> s l1 and l2  
L3 15 L1 AND L2

=> duplicate remove l3  
DUPLICATE PREFERENCE IS 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO'  
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n  
PROCESSING COMPLETED FOR L3  
L4 8 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)

=> d l4 1-8 ti

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1  
TI Vaccines expressed in plants

L4 ANSWER 2 OF 8 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
TI Vaccines expressed in plants.

L4 ANSWER 3 OF 8 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
TI Vaccines expressed in plants.

L4 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2  
TI Anti-viral vaccines expressed in plants for oral administration as food

L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3  
TI Vaccines produced and administered through edible transgenic plants

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Viral immunogens expressed in edible plants as vaccines

L4 ANSWER 7 OF 8 CABA COPYRIGHT 2004 CABI on STN

TI Biotechnology for the improvement of bananas and plantains.

L4 ANSWER 8 OF 8 MEDLINE on STN DUPLICATE 4  
TI Expression of hepatitis B surface antigen in transgenic plants.

=> d 14 1-8 bib

L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1  
AN 2000:157754 CAPLUS  
DN 132:199030  
TI Vaccines expressed in plants  
IN **Lam, Dominic Man-Kit; Arntzen, Charles Joel**; Mason,  
Hugh Stanley  
PA Prodigene, Inc., USA  
SO U.S., 31 pp., Cont.-in-part of U.S. 5,612,487.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6034298	A	20000307	US 1996-481291	19960823
	US 5612487	A	19970318	US 1993-26393	19930304
	WO 9420135	A1	19940915	WO 1994-US2332	19940304
	W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
PRAI	US 1991-750049	B2	19910826		
	US 1993-26393	A2	19930304		
	WO 1994-US2332	W	19940304		

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 8 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
AN 2001:239819 BIOSIS  
DN PREV200100239819  
TI Vaccines expressed in plants.  
AU **Arntzen, Charles Joel** [Inventor]; **Lam, Dominic Man-Kit**  
[Inventor]  
CS ASSIGNEE: Prodigene, Inc.  
PI US 6136320 October 24, 2000  
SO Official Gazette of the United States Patent and Trademark Office Patents,  
(Oct. 24, 2000) Vol. 1239, No. 4. e-file.  
CODEN: OGUPE7. ISSN: 0098-1133.  
DT Patent  
LA English  
ED Entered STN: 16 May 2001  
Last Updated on STN: 18 Feb 2002

L4 ANSWER 3 OF 8 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
AN 1999:492332 BIOSIS  
DN PREV199900492332  
TI Vaccines expressed in plants.  
AU **Arntzen, Charles Joel** [Inventor, Reprint author]; **Lam, Dominic Man-Kit** [Inventor]  
CS Energy BioSystems Corp., The Woodlands, TX, USA  
ASSIGNEE: Prodigene, Inc.  
PI US 5914123 Jun. 22, 1999  
SO Official Gazette of the United States Patent and Trademark Office Patents,  
(Jun. 22, 1999) Vol. 1223, No. 4. print.  
CODEN: OGUPE7. ISSN: 0098-1133.  
DT Patent

LA English  
ED Entered STN: 16 Nov 1999  
Last Updated on STN: 16 Nov 1999

L4 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2  
AN 1997:216105 CAPLUS  
DN 126:250215  
TI Anti-viral vaccines expressed in plants for oral administration as food  
IN **Lam, Dominic Man-Kit; Arntzen, Charles J.**  
PA Edible Vaccines, Inc., USA  
SO U.S., 25 pp., Cont.-in-part of U.S. Ser. No. 750,049, abandoned.  
CODEN: USXXAM

DT Patent  
LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5612487	A	19970318	US 1993-26393	19930304
	WO 9420135	A1	19940915	WO 1994-US2332	19940304
	W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9468133	A1	19940926	AU 1994-68133	19940304
	EP 728014	A1	19960828	EP 1994-916500	19940304
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	US 5914123	A	19990622	US 1995-479742	19950607
	US 6034298	A	20000307	US 1996-481291	19960823
	US 6136320	A	20001024	US 1998-111330	19980707
	US 2001053367	A1	20011220	US 2001-816846	20010323
	US 2003138456	A1	20030724	US 2001-918937	20010731
	US 2002006411	A1	20020117	US 2001-925990	20010809
	US 2004166121	A1	20040826	US 2003-733135	20031211
PRAI	US 1991-750049	B2	19910826		
	US 1993-26393	A2	19930304		
	US 1993-156508	A2	19931123		
	WO 1994-US2332	W	19940304		
	US 1995-479742	A1	19950607		
	US 1995-481552	A1	19950607		
	US 1998-111330	A1	19980707		
	US 2000-593908	A1	20000614		
	US 2000-676734	A1	20000929		
	US 2001-816846	B1	20010323		

L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3  
AN 1996:137918 CAPLUS  
DN 124:200199  
TI Vaccines produced and administered through edible transgenic plants  
IN **Lam, Dominic M.; Arntzen, Charles J.**  
PA Edible Vaccines, Inc., USA  
SO U.S., 12 pp. Cont. of U.S. Ser. No. 750,049, abandoned.  
CODEN: USXXAM

DT Patent  
LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5484719	A	19960116	US 1993-156508	19931123
	US 5914123	A	19990622	US 1995-479742	19950607
	US 6136320	A	20001024	US 1998-111330	19980707
	US 2001053367	A1	20011220	US 2001-816846	20010323
	US 2003138456	A1	20030724	US 2001-918937	20010731
	US 2002006411	A1	20020117	US 2001-925990	20010809
PRAI	US 1991-750049	B1	19910826		

US 1993-26393	A3	19930304
US 1993-156508	A2	19931123
WO 1994-US2332	A2	19940304
US 1995-479742	A1	19950607
US 1995-481552	A1	19950607
US 1998-111330	A1	19980707
US 2000-593908	A1	20000614
US 2000-676734	A1	20000929

L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1994:678853 CAPLUS  
 DN 121:278853  
 TI Viral immunogens expressed in edible plants as vaccines  
 IN Lam, Dominic Man-Kit; Arntzen, Charles Joel; Mason,  
 Hugh Stanley  
 PA Edible Vaccines Inc., USA  
 SO PCT Int. Appl., 60 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9420135	A1	19940915	WO 1994-US2332	19940304
	W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5612487	A	19970318	US 1993-26393	19930304
	AU 9468133	A1	19940926	AU 1994-68133	19940304
	EP 728014	A1	19960828	EP 1994-916500	19940304
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	US 5914123	A	19990622	US 1995-479742	19950607
	US 6034298	A	20000307	US 1996-481291	19960823
	US 6136320	A	20001024	US 1998-111330	19980707
	US 2001053367	A1	20011220	US 2001-816846	20010323
	US 2003138456	A1	20030724	US 2001-918937	20010731
	US 2002006411	A1	20020117	US 2001-925990	20010809
PRAI	US 1993-26393	A2	19930304		
	US 1991-750049	B2	19910826		
	US 1993-156508	A2	19931123		
	WO 1994-US2332	W	19940304		
	US 1995-479742	A1	19950607		
	US 1995-481552	A1	19950607		
	US 1998-111330	A1	19980707		
	US 2000-593908	A1	20000614		
	US 2000-676734	A1	20000929		

L4 ANSWER 7 OF 8 CABA COPYRIGHT 2004 CABI on STN  
 AN 95:37434 CABA  
 DN 19951600875  
 TI Biotechnology for the improvement of bananas and plantains  
 AU Arntzen, C. J.; Lam, D. M. K.  
 CS Plant Biotechnology Program, Institute of Biosciences and Technology Texas A&M University, 2121 Holcombe Boulevard, Houston, TX 77030, USA.  
 SO Biotechnology and development: expanding the capacity to produce food, (1992) pp. 313-320. 15 ref.  
 Publisher: United Nations Publications. Geneva  
 ISBN: 92-1-104392-1  
 CY Switzerland  
 DT Miscellaneous  
 LA English  
 ED Entered STN: 19950223  
 Last Updated on STN: 19950223

L4 ANSWER 8 OF 8 MEDLINE on STN DUPLICATE 4  
 AN 93101603 MEDLINE  
 DN PubMed ID: 1465391  
 TI Expression of hepatitis B surface antigen in transgenic plants.  
 AU Mason H S; Lam D M; Arntzen C J  
 CS AgriStar Inc., Conroe, TX 77301.  
 SO Proceedings of the National Academy of Sciences of the United States of America, (1992 Dec 15) 89 (24) 11745-9.  
 Journal code: 7505876. ISSN: 0027-8424.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199301  
 ED Entered STN: 19930205  
 Last Updated on STN: 19930205  
 Entered Medline: 19930119

=> d his

(FILE 'HOME' ENTERED AT 15:45:38 ON 21 SEP 2004)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO' ENTERED AT 15:45:54 ON 21 SEP 2004

L1 851 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
 L2 1713 S (LAM, D? OR LAM D?)/AU  
 L3 15 S L1 AND L2  
 L4 8 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)

=> s l1 or l2  
 L5 2549 L1 OR L2

=> s l5 not l3  
 L6 2534 L5 NOT L3

=> s l6 and plant and vaccine  
 L7 85 L6 AND PLANT AND VACCINE

=> s l7 and vir?  
 L8 45 L7 AND VIR?

=> duplicate remove l8  
 DUPLICATE PREFERENCE IS 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO'  
 KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n  
 PROCESSING COMPLETED FOR L8  
 L9 19 DUPLICATE REMOVE L8 (26 DUPLICATES REMOVED)

=> d l9 1-10 ti

L9 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 TI Novel **vaccine** compositions and methods of **vaccine** preparation for veterinary and human diseases

L9 ANSWER 2 OF 19 MEDLINE on STN DUPLICATE 1  
 TI Structural characterization of **plant**-derived hepatitis B surface antigen employed in oral immunization studies.

L9 ANSWER 3 OF 19 MEDLINE on STN DUPLICATE 2  
 TI **Plant** cell factories and mucosal vaccines.

L9 ANSWER 4 OF 19 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
 TI Towards a mucosal **vaccine** against HIV.

L9 ANSWER 5 OF 19 MEDLINE on STN DUPLICATE 3  
 TI Edible **plant** vaccines: applications for prophylactic and therapeutic molecular medicine.

L9 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 TI Oral immunology using **plant** product containing hepatitis surface antigen

L9 ANSWER 7 OF 19 MEDLINE on STN DUPLICATE 4  
 TI Oral immunization with hepatitis B surface antigen expressed in transgenic plants.

L9 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 TI Expression of immunogenic hepatitis B surface antigens in transgenic plants

L9 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 TI Orally immunogenic bacterial enterotoxins expressed in transgenic plants

L9 ANSWER 10 OF 19 MEDLINE on STN DUPLICATE 5  
 TI Human immune responses to a novel norwalk **virus vaccine** delivered in transgenic potatoes.

=> d 19 1-10 ti

L9 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 TI Novel **vaccine** compositions and methods of **vaccine** preparation for veterinary and human diseases

L9 ANSWER 2 OF 19 MEDLINE on STN DUPLICATE 1  
 TI Structural characterization of **plant**-derived hepatitis B surface antigen employed in oral immunization studies.

L9 ANSWER 3 OF 19 MEDLINE on STN DUPLICATE 2  
 TI **Plant** cell factories and mucosal vaccines.

L9 ANSWER 4 OF 19 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
 TI Towards a mucosal **vaccine** against HIV.

L9 ANSWER 5 OF 19 MEDLINE on STN DUPLICATE 3  
 TI Edible **plant** vaccines: applications for prophylactic and therapeutic molecular medicine.

L9 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 TI Oral immunology using **plant** product containing hepatitis surface antigen

L9 ANSWER 7 OF 19 MEDLINE on STN DUPLICATE 4  
 TI Oral immunization with hepatitis B surface antigen expressed in transgenic plants.

L9 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 TI Expression of immunogenic hepatitis B surface antigens in transgenic plants

L9 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 TI Orally immunogenic bacterial enterotoxins expressed in transgenic plants

L9 ANSWER 10 OF 19 MEDLINE on STN DUPLICATE 5  
 TI Human immune responses to a novel norwalk **virus vaccine** delivered in transgenic potatoes.

=> d 19 1-10 bib

L9 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:133103 CAPLUS  
DN 138:186387  
TI Novel **vaccine** compositions and methods of **vaccine**  
preparation for veterinary and human diseases  
IN **Lam, Dominic M. K.**; Zeng, Fanya; Leung, Frederick C.  
PA USA  
SO PCT Int. Appl., 146 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003013598	A2	20030220	WO 2002-US25126	20020808
	WO 2003013598	A3	20040108		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 2001-311106P	P	20010809		

L9 ANSWER 2 OF 19 MEDLINE on STN DUPLICATE 1  
AN 2003386654 MEDLINE  
DN PubMed ID: 12922138  
TI Structural characterization of **plant**-derived hepatitis B surface  
antigen employed in oral immunization studies.  
AU Smith Mark L; Richter Lizabeth; **Arntzen Charles J**; Shuler  
Michael L; Mason Hugh S  
CS Department of Chemical Engineering, Cornell University, Ithaca, NY 14853,  
USA.  
NC AI-42836 (NIAID)  
SO Vaccine, (2003 Sep 8) 21 (25-26) 4011-21.  
Journal code: 8406899. ISSN: 0264-410X.  
CY Netherlands  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200403  
ED Entered STN: 20030819  
Last Updated on STN: 20040326  
Entered Medline: 20040325

L9 ANSWER 3 OF 19 MEDLINE on STN DUPLICATE 2  
AN 2003211333 MEDLINE  
DN PubMed ID: 12732315  
TI **Plant** cell factories and mucosal vaccines.  
AU Walmsley Amanda M; **Arntzen Charles J**  
CS Department of Plant Biology, Arizona State University, Tempe AZ 85287,  
USA.. amanda.walmsley@asu.edu  
SO Current opinion in biotechnology, (2003 Apr) 14 (2) 145-50. Ref: 46  
Journal code: 9100492. ISSN: 0958-1669.  
CY England: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)



(REVIEW, TUTORIAL)

LA English  
 FS Priority Journals  
 EM 200402  
 ED Entered STN: 20030507  
 Last Updated on STN: 20040211  
 Entered Medline: 20040210

L9 ANSWER 4 OF 19 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on  
 STN  
 AN 2003:313548 BIOSIS  
 DN PREV200300313548  
 TI Towards a mucosal **vaccine** against HIV.  
 AU Matoba, N. [Reprint Author]; Bomsel, M. [Reprint Author]; **Arntzen, C. J.** [Reprint Author]; Mor, T. S. [Reprint Author]  
 CS Department of Plant Biology, Arizona Biodesign Institute, Arizona State University, P.O. Box 871601, Tempe, AZ, 85287-1601, USA  
 Nobuyuki.Matoba@asu.edu  
 SO In Vitro Cellular & Developmental Biology Plant, (Spring 2003) Vol. 39, No. Abstract, pp. 23-A. print.  
 Meeting Info.: Congress on In Vitro Biology. Portland, Oregon, USA. May 31-June 04, 2003. Society for In Vitro Biology.  
 ISSN: 1054-5476 (ISSN print).  
 DT Conference; (Meeting)  
 Conference; Abstract; (Meeting Abstract)  
 LA English  
 ED Entered STN: 2 Jul 2003  
 Last Updated on STN: 2 Jul 2003

L9 ANSWER 5 OF 19 MEDLINE on STN DUPLICATE 3  
 AN 2002370516 MEDLINE  
 DN PubMed ID: 12114111  
 TI Edible **plant** vaccines: applications for prophylactic and therapeutic molecular medicine.  
 AU Mason Hugh S; Warzecha Heribert; Mor Tsafrir; **Arntzen Charles J**  
 CS Boyce Thompson Institute for Plant Research, Tower Road, Ithaca, NY 14853-1801, USA.. hsm7@cornell.edu  
 SO Trends in molecular medicine, (2002 Jul) 8 (7) 324-9. Ref: 43  
 Journal code: 100966035. ISSN: 1471-4914.  
 CY England: United Kingdom  
 DT Journal; Article; (JOURNAL ARTICLE)  
 General Review; (REVIEW)  
 (REVIEW, TUTORIAL)  
 LA English  
 FS Priority Journals  
 EM 200212  
 ED Entered STN: 20020713  
 Last Updated on STN: 20021217  
 Entered Medline: 20021210

L9 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:297478 CAPLUS  
 DN 134:300775  
 TI Oral immunology using **plant** product containing hepatitis surface antigen  
 IN Thanavala, Yasmin; **Arntzen, Charles J.**  
 PA Health Research, Inc., USA; Boyce Thompson Institute for Plant Research, Inc.  
 SO Eur. Pat. Appl., 8 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI EP 1093820 A2 20010425 EP 2000-121916 20001007  
 EP 1093820 A3 20030102  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 ZA 2000005635 A 20010412 ZA 2000-5635 20001012  
 ZA 2000005633 A 20010417 ZA 2000-5633 20001012  
 ZA 2000005634 A 20010417 ZA 2000-5634 20001012  
 JP 2001172199 A2 20010626 JP 2000-313052 20001013  
 CN 1302651 A 20010711 CN 2000-134410 20001013  
 PRAI US 1999-418177 A 19991013  
 US 1999-420695 A 19991019

L9 ANSWER 7 OF 19 MEDLINE on STN DUPLICATE 4  
 AN 2001525843 MEDLINE  
 DN PubMed ID: 11553782  
 TI Oral immunization with hepatitis B surface antigen expressed in transgenic  
 plants.  
 AU Kong Q; Richter L; Yang Y F; Arntzen C J; Mason H S; Thanavala Y  
 CS Department of Immunology, Roswell Park Cancer Institute, Buffalo, NY  
 14263, USA.  
 NC AI42836 (NIAID)  
 SO Proceedings of the National Academy of Sciences of the United States of  
 America, (2001 Sep 25) 98 (20) 11539-44.  
 Journal code: 7505876. ISSN: 0027-8424.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 200112  
 ED Entered STN: 20010927  
 Last Updated on STN: 20030105  
 Entered Medline: 20011204

L9 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:441907 CAPLUS  
 DN 133:85116  
 TI Expression of immunogenic hepatitis B surface antigens in transgenic  
 plants  
 IN Mason, Hugh S.; Thanavala, Yasmin; Arntzen, Charles Joel;  
 Richter, Elizabeth  
 PA Boyce Thompson Institute for Plant Research At Cornell, USA; Health  
 Research Institute  
 SO PCT Int. Appl., 144 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000037610	A2	20000629	WO 1999-US31020	19991223
	WO 2000037610	A3	20020613		
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2357004	AA	20000629	CA 1999-2357004	19991223
	AU 2000025949	A1	20000712	AU 2000-25949	19991223
	EP 1230257	A2	20020814	EP 1999-968556	19991223
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	BR 9916522	A	20021224	BR 1999-16522	19991223

	JP 2003512812	T2	20030408	JP 2000-589666	19991223
	US 6551820	B1	20030422	US 1999-471573	19991223
	US 2004086530	A1	20040506	US 2003-335774	20030102
PRAI	US 1998-113827P	P	19981223		
	US 1999-471573	A3	19991223		
	WO 1999-US31020	W	19991223		

L9 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:441906 CAPLUS  
 DN 133:85115  
 TI Orally immunogenic bacterial enterotoxins expressed in transgenic plants  
 IN Mason, Hugh S.; **Arntzen, Charles J.**  
 PA Boyce Thompson Institute for Plant Research At Cornell, USA  
 SO PCT Int. Appl., 103 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000037609	A2	20000629	WO 1999-US30747	19991222
	WO 2000037609	A3	20000914		
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	CA 2359586	AA	20000629	CA 1999-2359586	19991222
	AU 2000023818	A1	20000712	AU 2000-23818	19991222
	AU 773953	B2	20040610		
	BR 9916515	A	20011106	BR 1999-16515	19991222
	EP 1175144	A2	20020130	EP 1999-967556	19991222
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	JP 2002533068	T2	20021008	JP 2000-589665	19991222
	US 2003176653	A1	20030918	US 2002-334729	20021230
PRAI	US 1998-113507P	P	19981222		
	US 1999-470124	B1	19991222		
	WO 1999-US30747	W	19991222		

L9 ANSWER 10 OF 19 MEDLINE on STN DUPLICATE 5  
 AN 2000413751 MEDLINE  
 DN PubMed ID: 10882612  
 TI Human immune responses to a novel norwalk virus vaccine delivered in transgenic potatoes.  
 AU Tacket C O; Mason H S; Losonsky G; Estes M K; Levine M M; **Arntzen C J**  
 CS Center for Vaccine Development, Baltimore, MD 21201, USA..  
 ctacket@medicine.umaryland.edu  
 NC AI-65299 (NIAID)  
 SO Journal of infectious diseases, (2000 Jul) 182 (1) 302-5.  
 Journal code: 0413675. ISSN: 0022-1899.  
 CY United States  
 DT (CLINICAL TRIAL)  
 Journal; Article; (JOURNAL ARTICLE)  
 (RANDOMIZED CONTROLLED TRIAL)  
 LA English  
 FS Abridged Index Medicus Journals; Priority Journals  
 EM 200008  
 ED Entered STN: 20000907  
 Last Updated on STN: 20030105  
 Entered Medline: 20000828

=> d 19 11-19 bib

L9 ANSWER 11 OF 19 MEDLINE on STN  
AN 2000240262 MEDLINE  
DN PubMed ID: 10753769  
TI Plants for delivery of edible vaccines.  
AU Walmsley A M; **Arntzen C J**  
CS Boyce Thompson Institute for Plant Research, Cornell University, Ithaca, NY 14853, USA.. amw21@cornell.edu  
SO Current opinion in biotechnology, (2000 Apr) 11 (2) 126-9. Ref: 37  
Journal code: 9100492. ISSN: 0958-1669.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LA English  
FS Priority Journals  
EM 200005  
ED Entered STN: 20000518  
Last Updated on STN: 20000518  
Entered Medline: 20000509

L9 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2000:327333 CAPLUS  
TI BeYDV geminivirus replicons and enhancement of foreign gene expression in transgenic plants.  
AU Hefferon, K. L.; Mor, T.; **Arntzen, C.**; Mason, H.  
CS Boyce Thompson Institute for Plant Research, Cornell University, Ithaca, NY, 14853-1801, USA  
SO Book of Abstracts, 219th ACS National Meeting, San Francisco, CA, March 26-30, 2000 (2000), BIOT-111 Publisher: American Chemical Society, Washington, D. C.  
CODEN: 69CLAC  
DT Conference; Meeting Abstract  
LA English

L9 ANSWER 13 OF 19 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
AN 1998:28228080 BIOTECHNO  
TI Pharmaceutical foodstuffs - Oral immunization with transgenic plants  
AU **Arntzen C.J.**  
CS C.J. Arntzen, Boyce Thompson Inst. for Plant Res., Ithaca, NY 14853-1801, United States.  
E-mail: cja7@cornell.edu  
SO Nature Medicine, (1998), 4/5 SUPPL. (502-503), 11 reference(s)  
CODEN: NAMEFI ISSN: 1078-8956  
DT Journal; Note  
CY United States  
LA English

L9 ANSWER 14 OF 19 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN  
AN 1998:414057 BIOSIS  
DN PREV199800414057  
TI Subunit vaccines produced and delivered in transgenic plants as "edible vaccines".  
AU Mason, H. S. [Reprint author]; Tacket, C. O.; Richter, L. J.; **Arntzen, C. J.**  
CS Boyce Thompson Inst. Plant Res., Tower Road, Ithaca, NY 14853-1801, USA  
SO Research in Immunology, (Jan., 1998) Vol. 149, No. 1, pp. 71-74. print.  
Meeting Info.: Euroconference on New Trends in Vaccine Research and Development: Adjuvants, Delivery Systems and Antigen Formulations. Paris, France. February 26-28, 1998.  
CODEN: RIMME5. ISSN: 0923-2494.

DT Conference; (Meeting)  
Conference; (Meeting Paper)  
LA English  
ED Entered STN: 2 Oct 1998  
Last Updated on STN: 2 Oct 1998

L9 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1998:730080 CAPLUS  
DN 130:114803  
TI Edible vaccines  
AU Wong, Sunny Y.; Ho, Ken S.; Mason, Hugh S.; Arntzen, Charles J.  
CS USA  
SO Science & Medicine (Philadelphia) (1998), 5(6), 36-45  
CODEN: SCMEFJ; ISSN: 1087-3309  
PB Science & Medicine  
DT Journal; General Review  
LA English

L9 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 1996:410601 CAPLUS  
DN 125:84641  
TI Vaccine using transgenic plant as animal feed,  
bacterial or viral antigen gene expression in plant,  
antigen gene modification incorporating plant codons, and  
protein endoplasmic reticulum retention signal  
IN Arntzen, Charles J.; Mason, Hugh S.; Haq, Tariq A.; Clements,  
John D.  
PA Texas A and M University, USA; Administrators of the Tulane Educational  
Fund  
SO PCT Int. Appl., 129 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9612801	A1	19960502	WO 1995-US13376	19951024
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2203679	AA	19960502	CA 1995-2203679	19951024
	AU 9641940	A1	19960515	AU 1996-41940	19951024
	AU 691707	B2	19980521		
	EP 793717	A1	19970910	EP 1995-940519	19951024
	R: AT, BE, DE, ES, FR, GB, IT, NL				
	JP 10507916	T2	19980804	JP 1995-514039	19951024
	NZ 297142	A	20010928	NZ 1995-297142	19951024
	US 6395964	B1	20020528	US 1997-817906	19970804
PRAI	US 1994-328716	A	19941024		
	WO 1995-US13376	W	19951024		

L9 ANSWER 17 OF 19 MEDLINE on STN DUPLICATE 6  
AN 96224284 MEDLINE  
DN PubMed ID: 8643575  
TI Expression of Norwalk virus capsid protein in transgenic tobacco  
and potato and its oral immunogenicity in mice.  
AU Mason H S; Ball J M; Shi J J; Jiang X; Estes M K; Arntzen C J  
CS Plant Biotechnology Program, Albert Alkek Institute of Biosciences and  
Technology, Texas A & M University, Houston, 77030-3303, USA.  
NC AI 36519 (NIAID)  
SO Proceedings of the National Academy of Sciences of the United States of

America, (1996 May 28) 93 (11) 5335-40.  
Journal code: 7505876. ISSN: 0027-8424.

CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199607  
ED Entered STN: 19960726  
Last Updated on STN: 19970203  
Entered Medline: 19960717

L9 ANSWER 18 OF 19 AGRICOLA Compiled and distributed by the National  
Agricultural Library of the Department of Agriculture of the United States  
of America. It contains copyrighted materials. All rights reserved.  
(2004) on STN DUPLICATE 7

AN 95:30555 AGRICOLA

DN IND20457964

TI Immunogenicity of transgenic **plant**-derived hepatitis B surface  
antigen.

AU Thanavala, Y.; Yang, Y.F.; Lyons, P.; Mason, H.S.; **Arntzen, C.**

CS Rosswell Park Cancer Institute, Buffalo, NY.

AV DNAL (500 N21P)

SO Proceedings of the National Academy of Sciences of the United States of  
America, Apr 11, 1995. Vol. 92, No. 8. p. 3358-3361

Publisher: Washington, D.C. : National Academy of Sciences,

CODEN: PNASA6; ISSN: 0027-8424

NTE Includes references

CY District of Columbia; United States

DT Article; Conference

FS U.S. Imprints not USDA, Experiment or Extension

LA English

L9 ANSWER 19 OF 19 AGRICOLA Compiled and distributed by the National  
Agricultural Library of the Department of Agriculture of the United States  
of America. It contains copyrighted materials. All rights reserved.  
(2004) on STN DUPLICATE 8

AN 95:65534 AGRICOLA

DN IND20484978

TI Transgenic plants as **vaccine** production systems.

AU Mason, H.S.; **Arntzen, C.J.**

CS Boyce Thompson Institute for Plant Research, Ithaca, NY.

AV DNAL (TA166.T72)

SO Trends in biotechnology, Sept 1995. Vol. 13, No. 9. p. 388-392

Publisher: Oxford : Elsevier Trends Journals.

CODEN: TRBIDM; ISSN: 0167-7799

NTE In the special issue: **Plant**-product and crop biotechnology.  
Includes references

CY England; United Kingdom

DT Article; Law

FS Non-U.S. Imprint other than FAO

LA English

=> d his

(FILE 'HOME' ENTERED AT 15:45:38 ON 21 SEP 2004)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO' ENTERED AT  
15:45:54 ON 21 SEP 2004

L1 851 S (ARNTZEN, C? OR ARNTZEN C?)/AU

L2 1713 S (LAM, D? OR LAM D?)/AU

L3 15 S L1 AND L2

L4 8 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)

L5 2549 S L1 OR L2

L6 2534 S L5 NOT L3

L7 85 S L6 AND PLANT AND VACCINE  
L8 45 S L7 AND VIR?  
L9 19 DUPLICATE REMOVE L8 (26 DUPLICATES REMOVED)

=> s plant(s)virus(s)antigen  
L10 491 PLANT(S) VIRUS(S) ANTIGEN

=> s l10 not l5  
L11 480 L10 NOT L5

=> s l11 and transgenic  
L12 79 L11 AND TRANSGENIC

=> s l12 and (human or animal)  
L13 35 L12 AND (HUMAN OR ANIMAL)

=> duplicate remove l13  
DUPLICATE PREFERENCE IS 'MEDLINE, CABA, CAPLUS, BIOSIS, BIOTECHNO'  
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n  
PROCESSING COMPLETED FOR L13  
L14 24 DUPLICATE REMOVE L13 (11 DUPLICATES REMOVED)

=> d l14 1-10 ti

L14 ANSWER 1 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Use of promoter from bifunctional  $\alpha$ -amylase/subtilisin inhibitor gene (BASI) to direct expression in the **transgenic** plant seed maternal tissue, especially the pericarp

L14 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Production of therapeutic proteins such as herpes virus vaccine in **transgenic** cereal crops

L14 ANSWER 3 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
TI Induction of antigen-specific systemic and mucosal immune responses by feeding animals **transgenic** plants expressing the antigen

L14 ANSWER 4 OF 24 MEDLINE on STN DUPLICATE 1  
TI A plant signal peptide-hepatitis B surface antigen fusion protein with enhanced stability and immunogenicity expressed in plant cells.

L14 ANSWER 5 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
TI Neutralising immunogenicity of a polyepitope antigen expressed in a **transgenic** food plant: A novel antigen to protect against measles

L14 ANSWER 6 OF 24 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 2  
TI Neutralising immunogenicity of a polyepitope antigen expressed in a **transgenic** food plant: a novel antigen to protect against measles.

L14 ANSWER 7 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Hepatitis B surface antigen immunopurification using a plant-derived specific antibody produced in large scale

L14 ANSWER 8 OF 24 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 3  
TI Expression in plants and immunogenicity of plant virus-based experimental rabies vaccine.

L14 ANSWER 9 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
TI A novel methodology to develop a foot and mouth disease virus (FMDV) peptide-based vaccine in **transgenic** plants

L14 ANSWER 10 OF 24 MEDLINE on STN DUPLICATE 4  
TI [Old and new prescriptions for infectious diseases and the newest recipes for biomedical products in plants].  
Stare i nowe sposoby leczenia chorob zakaznych: wirusy wszedzie i nigdzie.

=> d 114 2,4,5,8,9, bib

L14 ANSWER 2 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:656473 CAPLUS  
DN 139:196257  
TI Production of therapeutic proteins such as herpes virus vaccine in  
**transgenic** cereal crops  
IN Tackaberry, Eilleen; Dudani, Anil; Ganz, Peter; Sardana, Ravinder;  
Altosaar, Illimar  
PA Can.  
SO U.S. Pat. Appl. Publ., 21 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	US 2003159182	A1	20030821	US 2002-230365	20020829
PRAI	US 2001-315363P	P	20010829		

L14 ANSWER 4 OF 24 MEDLINE on STN DUPLICATE 1  
AN 2003106195 MEDLINE  
DN PubMed ID: 12601177  
TI A plant signal peptide-hepatitis B surface antigen fusion protein with  
enhanced stability and immunogenicity expressed in plant cells.  
AU Sojikul Punchapat; Buehner Norene; Mason Hugh S  
CS Department of Plant Biology, Cornell University and the Boyce Thompson  
Institute for Plant Research, Inc., Ithaca, NY 14853-1801, USA.  
NC AI42836 (NIAID)  
SO Proceedings of the National Academy of Sciences of the United States of  
America, (2003 Mar 4) 100 (5) 2209-14.  
Journal code: 7505876. ISSN: 0027-8424.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
OS GENBANK-AF504292  
EM 200305  
ED Entered STN: 20030306  
Last Updated on STN: 20030514  
Entered Medline: 20030513

L14 ANSWER 5 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
AN 2003:36428796 BIOTECHNO  
TI Neutralising immunogenicity of a polypeptide antigen expressed in a  
**transgenic** food plant: A novel antigen to protect against measles  
AU Bouche F.B.; Marquet-Blouin E.; Yanagi Y.; Steinmetz A.; Muller C.P.  
CS C.P. Muller, Laboratoire National de Sante, Department of Immunology, WHO  
Collaborative Center for Measles, 20A rue Auguste Lumiere, L-1950  
Luxembourg, Luxembourg.  
E-mail: claude.muller@lns.etat.lu  
SO Vaccine, (16 MAY 2003), 21/17-18 (2074-2081), 36 reference(s)  
CODEN: VACCDE ISSN: 0264-410X  
PUI S0264410X02007478  
DT Journal; Article  
CY United Kingdom  
LA English  
SL English

L14 ANSWER 8 OF 24 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 3  
AN 2002:189531 CABA  
DN 20023140842  
TI Expression in plants and immunogenicity of plant virus-based experimental



rabies vaccine  
AU Yusibov, V.; Hooper, D. C.; Spitsin, S. V.; Fleysh, N.; Kean, R. B.;  
Mikheeva, T.; Deka, D.; Karasev, A.; Cox, S.; Randall, J.; Koprowski, H.  
CS Biotechnology Foundation Laboratories at Thomas Jefferson University, 1020  
Locust Street, Room 346 JAH, Philadelphia, PA 19107, USA.  
h\_koprowski@hendrix.jci.tju.edu  
SO Vaccine, (2002) Vol. 20, No. 25/26, pp. 3155-3164. 36 ref.  
Publisher: Elsevier Science Ltd. Oxford  
ISSN: 0264-410X  
CY United Kingdom  
DT Journal  
LA English  
ED Entered STN: 20021108  
Last Updated on STN: 20021108

L14 ANSWER 9 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
AN 2002:34135950 BIOTECHNO  
TI A novel methodology to develop a foot and mouth disease virus (FMDV)  
peptide-based vaccine in **transgenic** plants  
AU Dus Santos M.J.; Wigdorovitz A.; Trono K.; Rios R.D.; Franzone P.M.; Gil  
F.; Moreno J.; Carrillo C.; Escribano J.M.; Borca M.V.  
CS M.J. Dus Santos, Instituto de Virologia, C.I.C.V., INTA-Castelar, Moron  
(1708), Pcia. de Buenos Aires, Argentina.  
E-mail: borca@cicv.inta.gov.ar  
SO Vaccine, (15 JAN 2002), 20/7-8 (1141-1147), 21 reference(s)  
CODEN: VACCDE ISSN: 0264-410X  
PUI S0264410X01004340  
DT Journal; Article  
CY United Kingdom  
LA English  
SL English

=> d 114 11-20 ti

L14 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Production of recombinant rotavirus structural proteins by transformed  
plant cell, and edible vaccine composition including the rotavirus antigen

L14 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Prime-boost vaccination strategy

L14 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Recombinant fusion molecules

L14 ANSWER 14 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
TI Towards development of an edible vaccine against bovine pneumonic  
pasteurellosis using **transgenic** white clover expressing a  
Mannheimia haemolytica A1 leukotoxin 50 fusion protein

L14 ANSWER 15 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
TI Plant-derived measles virus hemagglutinin protein induces neutralizing  
antibodies in mice

L14 ANSWER 16 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
TI Induction of a virus-specific antibody response to foot and mouth disease  
virus using the structural protein VP1 expressed in **transgenic**  
potato plants

L14 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Plant-derived antigens against respiratory syncytial virus

L14 ANSWER 18 OF 24 CABA COPYRIGHT 2004 CABI on STN  
TI Novel approaches to oral vaccines: delivery of antigens by edible plants  
Intra-abdominal infections, hepatitis, and gastroenteritis.

L14 ANSWER 19 OF 24 MEDLINE on STN DUPLICATE 5  
TI A plant-derived edible vaccine against hepatitis B virus.

L14 ANSWER 20 OF 24 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 6  
TI Rice cell culture as an alternative production system for functional diagnostic and therapeutic antibodies.

=> d l14 11, 13, 15,16,17,18,19 bib

L14 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:598135 CAPLUS  
DN 135:176438  
TI Production of recombinant rotavirus structural proteins by transformed plant cell, and edible vaccine composition including the rotavirus antigen  
IN Kim, Won-yong; Chung, In-sik; Lee, Youn-hyung; Kim, Hong-joong  
PA S. Korea  
SO PCT Int. Appl., 55 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001059070	A1	20010816	WO 2001-KR206	20010212
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 2003175303	A1	20030918	US 2002-203523	20020930
PRAI	KR 2000-6694	A	20000212		
	WO 2001-KR206	W	20010212		

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:338581 CAPLUS  
DN 134:339535  
TI Recombinant fusion molecules  
IN Ma, Julian; Dalsgaard, Kristian; Jakobsen, Palle Hoy; Manca, Fabrizio; Chargelegue, Daniel Maurice; Drake, Pascal Mark Wayne; Lehner, Thomas  
PA King's College London, UK  
SO PCT Int. Appl., 36 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001032714	A1	20010510	WO 2000-GB4216	20001103
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	BR 2000015287	A	20020709	BR 2000-15287	20001103

EP 1226178 A1 20020731 EP 2000-973028 20001103  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, SI,  
 LT, LV, FI, RO, MK, CY, AL  
 JP 2003512860 T2 20030408 JP 2001-535412 20001103  
 PRAI GB 1999-26084 A 19991103  
 WO 2000-GB4216 W 20001103  
 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 15 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
 AN 2001:32178367 BIOTECHNO  
 TI Plant-derived measles virus hemagglutinin protein induces neutralizing  
 antibodies in mice  
 AU Huang Z.; Dry I.; Webster D.; Strugnell R.; Wesselingh S.  
 CS S. Wesselingh, Infectious Diseases Unit, Alfred Hospital, Monash  
 University, Commercial Road, Prahran, Vic. 3181, Australia.  
 E-mail: s.wesselingh@alfred.org.au  
 SO Vaccine, (28 FEB 2001), 19/15-16 (2163-2171), 41 reference(s)  
 CODEN: VACCDE ISSN: 0264-410X  
 PUI S0264410X0000390X  
 DT Journal; Article  
 CY United Kingdom  
 LA English  
 SL English

L14 ANSWER 16 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
 AN 2001:32220649 BIOTECHNO  
 TI Induction of a virus-specific antibody response to foot and mouth disease  
 virus using the structural protein VP1 expressed in **transgenic**  
 potato plants  
 AU Carrillo C.; Wigdorovitz A.; Trono K.; Dus Santos M.J.; Castanon S.;  
 Sadir A.M.; Ordas R.; Escribano J.M.; Borca M.V.  
 CS M.V. Borca, Instituto de Virologia, C.I.C.V., INTA-Castelar, Moron (1708)  
 Picia, Buenos Aires, Argentina.  
 E-mail: mborca@cicv.inta.gov.ar  
 SO Viral Immunology, (2001), 14/1 (49-57), 16 reference(s)  
 CODEN: VIIMET ISSN: 0882-8245  
 DT Journal; Article  
 CY United States  
 LA English  
 SL English

L14 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2000:814632 CAPLUS  
 DN 133:359238  
 TI Plant-derived antigens against respiratory syncytial virus  
 IN Buetow, Dennis E.; Korban, Schuyler S.; Sandhu, Jagdeep; Krasnyanski,  
 Sergei F.  
 PA The Board of Trustees of the University of Illinois, USA  
 SO PCT Int. Appl., 67 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000068392	A1	20001116	WO 2000-US12582	20000510
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,				

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
PRAI US 1999-133536P P 19990511  
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 18 OF 24 CABA COPYRIGHT 2004 CABI on STN  
AN 2001:47076 CABA  
DN 20013027389  
TI Novel approaches to oral vaccines: delivery of antigens by edible plants  
Intra-abdominal infections, hepatitis, and gastroenteritis  
AU Yu Jie; Langridge, W. H. R.; Yu, J.  
CS Department of Biochemistry, Center for Molecular Biology and Gene Therapy,  
School of Medicine, Loma Linda University, Loma Linda, CA 92359, USA.  
SO Current Infectious Disease Reports, (2000) Vol. 2, No. 1, pp. 73-77. 31  
ref.  
Publisher: Current Science Inc. Philadelphia  
ISSN: 1523-3847  
CY United States  
DT Journal  
LA English  
ED Entered STN: 20010504  
Last Updated on STN: 20010504

L14 ANSWER 19 OF 24 MEDLINE on STN DUPLICATE 5  
AN 1999438100 MEDLINE  
DN PubMed ID: 10506582  
TI A plant-derived edible vaccine against hepatitis B virus.  
CM Erratum in: FASEB J 1999 Dec;13(15):2339  
AU Kapusta J; Modelska A; Figlerowicz M; Pniewski T; Letellier M; Lisowa O;  
Yusibov V; Koprowski H; Plucienniczak A; Legocki A B  
CS Institute of Bioorganic Chemistry of the Polish Academy of Sciences,  
Poznan, Poland.  
SO FASEB journal : official publication of the Federation of American  
Societies for Experimental Biology, (1999 Oct) 13 (13) 1796-9.  
Journal code: 8804484. ISSN: 0892-6638.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199911  
ED Entered STN: 20000111  
Last Updated on STN: 20000309  
Entered Medline: 19991102

=> d l14 21-24 ti

L14 ANSWER 21 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
TI Plant viral vectors based on tobamoviruses

L14 ANSWER 22 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
TI Protective immune response to foot-and-mouth disease virus with VP1  
expressed in **transgenic** plants

L14 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
TI Antigen gene expression cassettes in plant cells, **animal** vaccine  
delivery, and vaccines against mucosal disease

L14 ANSWER 24 OF 24 MEDLINE on STN  
TI Expression of **human** hepatitis B virus surface antigen gene in  
**transgenic** tobacco.

=> d l14 22-24 bib

L14 ANSWER 22 OF 24 BIOTECHNO COPYRIGHT 2004 Elsevier Science B.V. on STN  
 AN 1998:28116964 BIOTECHNO  
 TI Protective immune response to foot-and-mouth disease virus with VP1  
 expressed in **transgenic** plants  
 AU Carrillo C.; Wigdorovitz A.; Oliveros J.C.; Zamorano P.I.; Sadir A.M.;  
 Gomez N.; Salinas J.; Escribano J.M.; Borca M.V.  
 CS M.V. Borca, Instituto de Virologia, C.I.C.V, INTA-Castelar, 1708 Pcia.  
 Buenos Aires, Argentina.  
 SO Journal of Virology, (1998), 72/2 (1688-1690), 22 reference(s)  
 CODEN: JOVIAM ISSN: 0022-538X  
 DT Journal; Article  
 CY United States  
 LA English  
 SL English

L14 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:310007 CAPLUS  
 DN 126:273267  
 TI Antigen gene expression cassettes in plant cells, **animal** vaccine  
 delivery, and vaccines against mucosal disease  
 IN Howard, John A.; All, Benjamin P..  
 PA Howard, John A., USA  
 SO PCT Int. Appl., 50 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9710347	A1	19970320	WO 1996-US14662	19960913
	W: AU, CA, JP, NZ				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2232023	AA	19970320	CA 1996-2232023	19960913
	AU 9669762	A1	19970401	AU 1996-69762	19960913
	US 2002058312	A1	20020516	US 2001-797097	20010301
PRAI	US 1995-529006	A	19950915		
	WO 1996-US14662	W	19960913		

L14 ANSWER 24 OF 24 MEDLINE on STN  
 AN 94347189 MEDLINE  
 DN PubMed ID: 8068185  
 TI Expression of **human** hepatitis B virus surface antigen gene in  
**transgenic** tobacco.  
 AU Liu Y L; Wang J F; Qiu B S; Zhao S Z; Tian B  
 CS Institute of Microbiology, Academia Sinica, Beijing, PRC.  
 SO Science in China. Series B, Chemistry, life sciences & earth sciences,  
 (1994 Jan) 37 (1) 37-41.  
 Journal code: 8913082. ISSN: 1001-652X.  
 CY China  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Priority Journals  
 EM 199409  
 ED Entered STN: 19941006  
 Last Updated on STN: 19941006  
 Entered Medline: 19940927

=> d his

(FILE 'HOME' ENTERED AT 15:45:38 ON 21 SEP 2004)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO' ENTERED AT  
 15:45:54 ON 21 SEP 2004

L1 851 S (ARNTZEN, C? OR ARNTZEN C?)/AU

L2 1713 S (LAM, D? OR LAM D?)/AU  
 L3 15 S L1 AND L2  
 L4 8 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)  
 L5 2549 S L1 OR L2  
 L6 2534 S L5 NOT L3  
 L7 85 S L6 AND PLANT AND VACCINE  
 L8 45 S L7 AND VIR?  
 L9 19 DUPLICATE REMOVE L8 (26 DUPLICATES REMOVED)  
 L10 491 S PLANT(S)VIRUS(S)ANTIGEN  
 L11 480 S L10 NOT L5  
 L12 79 S L11 AND TRANSGENIC  
 L13 35 S L12 AND (HUMAN OR ANIMAL)  
 L14 24 DUPLICATE REMOVE L13 (11 DUPLICATES REMOVED)

=> file uspatfull

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	76.96	77.17

FILE 'USPATFULL' ENTERED AT 15:54:07 ON 21 SEP 2004  
 CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 21 Sep 2004 (20040921/PD)  
 FILE LAST UPDATED: 21 Sep 2004 (20040921/ED)  
 HIGHEST GRANTED PATENT NUMBER: US6795973  
 HIGHEST APPLICATION PUBLICATION NUMBER: US2004181840  
 CA INDEXING IS CURRENT THROUGH 21 Sep 2004 (20040921/UPCA)  
 ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 21 Sep 2004 (20040921/PD)  
 REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2004  
 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2004

>>> USPAT2 is now available. USPATFULL contains full text of the <<<  
 >>> original, i.e., the earliest published granted patents or <<<  
 >>> applications. USPAT2 contains full text of the latest US <<<  
 >>> publications, starting in 2001, for the inventions covered in <<<  
 >>> USPATFULL. A USPATFULL record contains not only the original <<<  
 >>> published document but also a list of any subsequent <<<  
 >>> publications. The publication number, patent kind code, and <<<  
 >>> publication date for all the US publications for an invention <<<  
 >>> are displayed in the PI (Patent Information) field of USPATFULL <<<  
 >>> records and may be searched in standard search fields, e.g., /PN, <<<  
 >>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<  
 >>> through the new cluster USPATALL. Type FILE USPATALL to <<<  
 >>> enter this cluster. <<<  
 >>> <<<  
 >>> Use USPATALL when searching terms such as patent assignees, <<<  
 >>> classifications, or claims, that may potentially change from <<<  
 >>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate  
 substance identification.

=> S (ARNTZEN, C? OR ARNTZEN C?)/AU  
 25 ARNTZEN, C?/AU  
 25 ARNTZEN C?/AU  
 L15 25 (ARNTZEN, C? OR ARNTZEN C?)/AU

=> S (LAM, D? OR LAM D?)/AU  
 85 LAM, D?/AU  
 85 LAM D?/AU  
 L16 85 (LAM, D? OR LAM D?)/AU

=> s l16 and l15

L17 9 L16 AND L15

=> d l17 1-9 ti

L17 ANSWER 1 OF 9 USPATFULL on STN  
TI Vaccines expressed in plants

L17 ANSWER 2 OF 9 USPATFULL on STN  
TI Vaccines expressed in plants

L17 ANSWER 3 OF 9 USPATFULL on STN  
TI Vaccines expressed in plants

L17 ANSWER 4 OF 9 USPATFULL on STN  
TI Vaccines expressed in plants

L17 ANSWER 5 OF 9 USPATFULL on STN  
TI Vaccines expressed in plants

L17 ANSWER 6 OF 9 USPATFULL on STN  
TI Vaccines expressed in plants

L17 ANSWER 7 OF 9 USPATFULL on STN  
TI Vaccines expressed in plants

L17 ANSWER 8 OF 9 USPATFULL on STN  
TI Anti-viral vaccines expressed in plants

L17 ANSWER 9 OF 9 USPATFULL on STN  
TI Vaccines produced and administered through edible plants

=> d l17 1-9 bib

L17 ANSWER 1 OF 9 USPATFULL on STN

AN 2004:215015 USPATFULL

TI Vaccines expressed in plants

IN Arntzen, Charles Joel, The Woodlands, TX, UNITED STATES

Lam, Dominic Man-Kit, The Woodlands, TX, UNITED STATES

PI US 2004166121 A1 20040826

AI US 2003-733135 A1 20031211 (10)

RLI Continuation of Ser. No. US 2001-816846, filed on 23 Mar 2001, ABANDONED

Continuation of Ser. No. US 2000-593908, filed on 14 Jun 2000, ABANDONED

Continuation of Ser. No. US 1998-111330, filed on 7 Jul 1998, GRANTED,

Pat. No. US 6136320 Continuation of Ser. No. US 1995-479742, filed on 7

Jun 1995, GRANTED, Pat. No. US 5914123 Division of Ser. No. US

1993-26393, filed on 4 Mar 1993, GRANTED, Pat. No. US 5612487

Continuation-in-part of Ser. No. US 1991-750049, filed on 26 Aug 1991,  
ABANDONED

DT Utility

FS APPLICATION

LREP MCKEE, VOORHEES & SEASE, P.L.C., 801 GRAND AVENUE, SUITE 3200, DES  
MOINES, IA, 50309-2721

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 11 Drawing Page(s)

LN.CNT 2402

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 2 OF 9 USPATFULL on STN

AN 2003:200472 USPATFULL

TI Vaccines expressed in plants

IN Arntzen, Charles Joel, The Woodlands, TX, UNITED STATES

Lam, Dominic Man-Kit, The Woodlands, TX, UNITED STATES

PI US 2003138456 A1 20030724

AI US 2001-918937 A1 20010731 (9)  
RLI Continuation of Ser. No. US 2000-676734, filed on 29 Sep 2000, PENDING  
Continuation of Ser. No. US 1998-111330, filed on 7 Jul 1998, GRANTED,  
Pat. No. US 6136320 Continuation of Ser. No. US 1995-479742, filed on 7  
Jun 1995, GRANTED, Pat. No. US 5914123 Division of Ser. No. US  
1993-26393, filed on 4 Mar 1993, GRANTED, Pat. No. US 5612487 Division  
of Ser. No. WO 1994-US2332, filed on 4 Mar 1994, UNKNOWN  
Continuation-in-part of Ser. No. US 1993-26393, filed on 4 Mar 1993,  
PATENTED Continuation-in-part of Ser. No. US 1991-750049, filed on 26  
Aug 1991, ABANDONED Continuation-in-part of Ser. No. US 1993-156508,  
filed on 23 Nov 1993, GRANTED, Pat. No. US 5484719  
DT Utility  
FS APPLICATION  
LREP MCKEE, VOORHEES & SEASE, P.L.C., 801 GRAND AVENUE, SUITE 3200, DES  
MOINES, IA, 50309-2721  
CLMN Number of Claims: 72  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Page(s)  
LN.CNT 2150  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 3 OF 9 USPATFULL on STN  
AN 2002:12035 USPATFULL  
TI Vaccines expressed in plants  
IN **Arntzen, Charles Joel**, The Woodlands, TX, UNITED STATES  
**Lam, Dominic Man-Kit**, The Woodlands, TX, UNITED STATES  
PI US 2002006411 A1 20020117  
AI US 2001-925990 A1 20010809 (9)  
RLI Continuation of Ser. No. US 1995-481552, filed on 7 Jun 1995, PENDING  
Continuation of Ser. No. US 2000-676734, filed on 29 Sep 2000, PENDING  
Continuation of Ser. No. US 1998-111330, filed on 7 Jul 1998, GRANTED,  
Pat. No. US 6136320 Continuation of Ser. No. US 1995-479742, filed on 7  
Jun 1995, GRANTED, Pat. No. US 5914123 Division of Ser. No. US  
1993-26393, filed on 4 Mar 1993, GRANTED, Pat. No. US 5612487 Division  
of Ser. No. WO 1994-US2332, filed on 4 Mar 1994, UNKNOWN  
Continuation-in-part of Ser. No. US 1993-26393, filed on 4 Mar 1993,  
GRANTED, Pat. No. US 5612487 Continuation-in-part of Ser. No. US  
1991-750049, filed on 26 Aug 1991, UNKNOWN Continuation-in-part of Ser.  
No. US 1993-156508, filed on 23 Nov 1993, GRANTED, Pat. No. US 5484719  
DT Utility  
FS APPLICATION  
LREP ZARLEY MCKEE THOMTE VOORHEES & SEASE PLC, SUITE 3200, 801 GRAND AVENUE,  
DES MOINES, IA, 50309-2721  
CLMN Number of Claims: 72  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Page(s)  
LN.CNT 2155  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 4 OF 9 USPATFULL on STN  
AN 2001:233140 USPATFULL  
TI Vaccines expressed in plants  
IN **Arntzen, Charles Joel**, The Woodlands, TX, United States  
**Lam, Dominic Man-Kit**, The Woodlands, TX, United States  
PA PRODIGENE, INC. (U.S. corporation)  
PI US 2001053367 A1 20011220  
AI US 2001-816846 A1 20010323 (9)  
RLI Continuation of Ser. No. US 2000-593908, filed on 14 Jun 2000, PENDING  
Continuation of Ser. No. US 1998-111330, filed on 7 Jul 1998, GRANTED,  
Pat. No. US 6136320 Continuation of Ser. No. US 1995-479742, filed on 7  
Jun 1995, GRANTED, Pat. No. US 5914123 Division of Ser. No. US  
1993-26393, filed on 4 Mar 1993, GRANTED, Pat. No. US 5612487 Division  
of Ser. No. WO 1994-US2332, filed on 4 Mar 1994, UNKNOWN  
Continuation-in-part of Ser. No. US 1993-26393, filed on 4 Mar 1993,  
GRANTED, Pat. No. US 5612487 Continuation-in-part of Ser. No. US



1991-750049, filed on 26 Aug 1991, ABANDONED Continuation-in-part of  
Ser. No. US 1993-156508, filed on 23 Nov 1993, GRANTED, Pat. No. US  
5484719

DT Utility  
FS APPLICATION  
LREP ZARLEY MCKEE THOMTE VOORHEES & SEASE PLC, SUITE 3200, 801 GRAND AVENUE,  
DES MOINES, IA, 50309-2721  
CLMN Number of Claims: 72  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Page(s)  
LN.CNT 1680  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 5 OF 9 USPATFULL on STN  
AN 2000:141888 USPATFULL  
TI Vaccines expressed in plants  
IN **Arntzen, Charles Joel**, The Woodlands, TX, United States  
**Lam, Dominic Man-Kit**, The Woodlands, TX, United States  
PA Prodigene, Inc., College Station, TX, United States (U.S. corporation)  
PI US 6136320 20001024  
AI US 1998-111330 19980707 (9)  
RLI Continuation of Ser. No. US 1995-479742, filed on 7 Jun 1995, now  
patented, Pat. No. US 5914123 which is a division of Ser. No. US  
1993-26393, filed on 4 Mar 1993, now patented, Pat. No. US 5612487,  
issued on 18 Mar 1997 And a continuation-in-part of Ser. No. WO  
1994-US2332, filed on 4 Mar 1994 which is a continuation-in-part of Ser.  
No. US 26393 which is a continuation-in-part of Ser. No. US 1991-750049,  
filed on 26 Aug 1991, now abandoned which is a continuation-in-part of  
Ser. No. US 1993-156508, filed on 23 Nov 1993, now patented, Pat. No. US  
5484719, issued on 16 Jan 1996

DT Utility  
FS Granted  
EXNAM Primary Examiner: Mosher, Mary  
LREP Sweeney, Patricia A. Zarley, McKee, Thomte, Voorhees & Sease  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1  
DRWN 14 Drawing Figure(s); 11 Drawing Page(s)  
LN.CNT 2297  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 6 OF 9 USPATFULL on STN  
AN 2000:28192 USPATFULL  
TI Vaccines expressed in plants  
IN **Lam, Dominic Man-Kit**, The Woodlands, TX, United States  
**Arntzen, Charles Joel**, The Woodlands, TX, United States  
Mason, Hugh Stanley, The Woodlands, TX, United States  
PA Prodigene, Inc., College Station, TX, United States (U.S. corporation)  
PI US 6034298 20000307  
WO 9420135 19940915  
AI US 1996-481291 19960823 (8)  
WO 1994-US2332 19940304  
19960823 PCT 371 date  
19960823 PCT 102(e) date  
RLI Continuation-in-part of Ser. No. US 1993-26393, filed on 4 Mar 1993, now  
patented, Pat. No. US 5612487, issued on 18 Mar 1997 which is a  
continuation-in-part of Ser. No. US 1991-750049, filed on 26 Aug 1991,  
now abandoned

DT Utility  
FS Granted  
EXNAM Primary Examiner: Campell, Bruce R.  
LREP Zarley, McKee, Thomte, Voorhees & Sease  
CLMN Number of Claims: 12  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 11 Drawing Page(s)  
LN.CNT 2189

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 7 OF 9 USPATFULL on STN  
AN 1999:69513 USPATFULL  
TI Vaccines expressed in plants  
IN **Arntzen, Charles Joel**, The Woodlands, TX, United States  
**Lam, Dominic Man-Kit**, The Woodlands, TX, United States<sup>4</sup>)  
PA Prodigene, Inc., College Station, TX, United States (U.S. corporation)  
PI US 5914123 19990622  
AI US 1995-479742 19950607 (8)  
RLI Division of Ser. No. US 1993-26393, filed on 4 Mar 1993, now patented,  
Pat. No. US 5612487 And a continuation-in-part of Ser. No. WO  
1994-US2332, filed on 4 Mar 1994 which is a continuation-in-part of Ser.  
No. US 1991-750049, filed on 26 Aug 1991, now abandoned And a  
continuation-in-part of Ser. No. US 1993-156508, filed on 23 Nov 1993,  
now patented, Pat. No. US 5484719  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Mosher, Mary E.  
LREP Zarley, McKee, Thomte, Voorhees, & Sease  
CLMN Number of Claims: 7  
ECL Exemplary Claim: 1,4  
DRWN 11 Drawing Figure(s); 11 Drawing Page(s)  
LN.CNT 2168  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 8 OF 9 USPATFULL on STN  
AN 97:22927 USPATFULL  
TI Anti-viral vaccines expressed in plants  
IN **Lam, Dominic Man-Kit**, The Woodlands, TX, United States  
**Arntzen, Charles J.**, The Woodlands, TX, United States  
PA Edible Vaccines, Inc., Conroe, TX, United States (U.S. corporation)  
PI US 5612487 19970318  
AI US 1993-26393 19930304 (8)  
RLI Continuation-in-part of Ser. No. US 1991-750049, filed on 26 Aug 1991,  
now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Fox, David T.; Assistant Examiner: Rories, Charles C.  
P.  
LREP McDaniel, C. StevenConley, Rose & Tayon.  
CLMN Number of Claims: 14  
ECL Exemplary Claim: 1  
DRWN 11 Drawing Figure(s); 8 Drawing Page(s)  
LN.CNT 1871  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 9 OF 9 USPATFULL on STN  
AN 96:5723 USPATFULL  
TI Vaccines produced and administered through edible plants  
IN **Lam, Dominic M.**, The Woodlands, TX, United States  
**Arntzen, Charles J.**, College Station, TX, United States  
PA Edible Vaccines, Inc., Conroe, TX, United States (U.S. corporation)  
PI US 5484719 19960116  
AI US 1993-156508 19931123 (8)  
RLI Continuation of Ser. No. US 1991-750049, filed on 26 Aug 1991, now  
abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Fox, David T.; Assistant Examiner: Rories, Charles  
LREP McDaniel, C. StevenConley, Rose & Tayon  
CLMN Number of Claims: 14  
ECL Exemplary Claim: 5  
DRWN 2 Drawing Figure(s); 2 Drawing Page(s)  
LN.CNT 974

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 15:45:38 ON 21 SEP 2004)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO' ENTERED AT 15:45:54 ON 21 SEP 2004

L1 851 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
L2 1713 S (LAM, D? OR LAM D?)/AU  
L3 15 S L1 AND L2  
L4 8 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)  
L5 2549 S L1 OR L2  
L6 2534 S L5 NOT L3  
L7 85 S L6 AND PLANT AND VACCINE  
L8 45 S L7 AND VIR?  
L9 19 DUPLICATE REMOVE L8 (26 DUPLICATES REMOVED)  
L10 491 S PLANT(S)VIRUS(S)ANTIGEN  
L11 480 S L10 NOT L5  
L12 79 S L11 AND TRANSGENIC  
L13 35 S L12 AND (HUMAN OR ANIMAL)  
L14 24 DUPLICATE REMOVE L13 (11 DUPLICATES REMOVED)

FILE 'USPATFULL' ENTERED AT 15:54:07 ON 21 SEP 2004

L15 25 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
L16 85 S (LAM, D? OR LAM D?)/AU  
L17 9 S L16 AND L15

=> s l15 or l16

L18 101 L15 OR L16

=> s l18 not l17

L19 92 L18 NOT L17

=> s l19 and plant and vaccine

213514 PLANT  
21306 VACCINE

L20 9 L19 AND PLANT AND VACCINE

=> d l20 1-9 ti

L20 ANSWER 1 OF 9 USPATFULL on STN

TI Methods and compositions for stable transgenic plant  
pharmaceuticals and their use as contraceptives

L20 ANSWER 2 OF 9 USPATFULL on STN

TI Expression of immunogenic hepatitis B surface antigens in transgenic  
plants

L20 ANSWER 3 OF 9 USPATFULL on STN

TI Phospholipases, nucleic acids encoding them and methods for making and  
using them

L20 ANSWER 4 OF 9 USPATFULL on STN

TI Orally immunogenic bacterial enterotoxins expressed in transgenic plants

L20 ANSWER 5 OF 9 USPATFULL on STN

TI Gemini virus vectors for gene expression in plants

L20 ANSWER 6 OF 9 USPATFULL on STN

TI Expression of immunogenic hepatitis B surface antigens in transgenic  
plants

L20 ANSWER 7 OF 9 USPATFULL on STN

TI Oral immunization with transgenic plants

L20 ANSWER 8 OF 9 USPATFULL on STN

TI Gemini virus vectors for gene expression in plants

L20 ANSWER 9 OF 9 USPATFULL on STN

TI Oral immunization with transgenic plants

=> d 120 2,6,7,9 bib

L20 ANSWER 2 OF 9 USPATFULL on STN

AN 2004:113691 USPATFULL

TI Expression of immunogenic hepatitis B surface antigens in transgenic plants

IN Mason, Hugh S., Ithaca, NY, UNITED STATES

Thanavala, Yasmin, Williamsville, NY, UNITED STATES

**Arntzen, Charles Joel**, Ithaca, NY, UNITED STATES

Ritcher, Elizabeth, Ithaca, NY, UNITED STATES

PA Boyce Thompson Institute (U.S. corporation)

PI US 2004086530 A1 20040506

AI US 2003-335774 A1 20030102 (10)

RLI Division of Ser. No. US 1999-471573, filed on 23 Dec 1999, GRANTED, Pat. No. US 6551820

PRAI US 1998-113827P 19981223 (60)

DT Utility

FS APPLICATION

LREP PALMER & DODGE, LLP, KATHLEEN M. WILLIAMS, 111 HUNTINGTON AVENUE, BOSTON, MA, 02199

CLMN Number of Claims: 28

ECL Exemplary Claim: 1

DRWN 36 Drawing Page(s)

LN.CNT 3652

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 6 OF 9 USPATFULL on STN

AN 2003:108988 USPATFULL

TI Expression of immunogenic hepatitis B surface antigens in transgenic plants

IN Mason, Hugh S., Ithaca, NY, United States

Thanavala, Yasmin, Williamsville, NY, United States

**Arntzen, Charles Joel**, Ithaca, NY, United States

Richter, Elizabeth, Ithaca, NY, United States

PA Boyce Thompson Institute for Plant Research, Ithaca, NY, United States (U.S. corporation)

PI US 6551820 B1 20030422

AI US 1999-471573 19991223 (9)

PRAI US 1998-113827P 19981223 (60)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Wortman, Donna

LREP Williams, Kathleen M., Spar, Elizabeth N., Palmer & Dodge LLP

CLMN Number of Claims: 41

ECL Exemplary Claim: 1

DRWN 42 Drawing Figure(s); 36 Drawing Page(s)

LN.CNT 3582

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 7 OF 9 USPATFULL on STN

AN 2002:122824 USPATFULL

TI Oral immunization with transgenic plants

IN **Arntzen, Charles J.**, Ithaca, NY, United States

Mason, Hugh S., Ithaca, NY, United States

Tariq, Haq A., San Antonio, TX, United States

Clements, John D., New Orleans, LA, United States

PA The Texas A&M University System, College Station, TX, United States  
(U.S. corporation)  
The Administrators of the Tulane Fund, New Orleans, LA, United States  
(U.S. corporation)  
PI US 6395964 B1 20020528  
WO 9612801 19960502  
AI US 1997-817906 19970804 (8)  
WO 1995-US13376 19951024  
19970804 PCT 371 date  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Nelson, Amy J.; Assistant Examiner: Mehta, Ashwin  
LREP Fulbright & Jaworski, L.L.P.  
CLMN Number of Claims: 15  
ECL Exemplary Claim: 1  
DRWN 21 Drawing Figure(s); 18 Drawing Page(s)  
LN.CNT 2920  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L20 ANSWER 9 OF 9 USPATFULL on STN  
AN 2001:29710 USPATFULL  
TI Oral immunization with transgenic plants  
IN **Arntzen, Charles J.**, Ithaca, NY, United States  
Mason, Hugh S., Ithaca, NY, United States  
Haq, Tariq A., San Antonio, TX, United States  
PA Texas A & M University System, College Station, TX, United States (U.S.  
corporation)  
PI US 6194560 B1 20010227  
AI US 1998-191852 19981112 (9)  
RLI Division of Ser. No. US 817906, now abandoned Continuation-in-part of  
Ser. No. US 1994-328716, filed on 24 Oct 1994, now abandoned  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Bui, Phuong T.  
LREP Fulbright & Jaworski, L.L.P.  
CLMN Number of Claims: 1  
ECL Exemplary Claim: 1  
DRWN 21 Drawing Figure(s); 18 Drawing Page(s)  
LN.CNT 2819  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 15:45:38 ON 21 SEP 2004)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO' ENTERED AT  
15:45:54 ON 21 SEP 2004

L1 851 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
L2 1713 S (LAM, D? OR LAM D?)/AU  
L3 15 S L1 AND L2  
L4 8 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)  
L5 2549 S L1 OR L2  
L6 2534 S L5 NOT L3  
L7 85 S L6 AND PLANT AND VACCINE  
L8 45 S L7 AND VIR?  
L9 19 DUPLICATE REMOVE L8 (26 DUPLICATES REMOVED)  
L10 491 S PLANT(S)VIRUS(S)ANTIGEN  
L11 480 S L10 NOT L5  
L12 79 S L11 AND TRANSGENIC  
L13 35 S L12 AND (HUMAN OR ANIMAL)  
L14 24 DUPLICATE REMOVE L13 (11 DUPLICATES REMOVED)

FILE 'USPATFULL' ENTERED AT 15:54:07 ON 21 SEP 2004

L15 25 S (ARNTZEN, C? OR ARNTZEN C?)/AU

L16 85 S (LAM, D? OR LAM D?)/AU  
 L17 9 S L16 AND L15  
 L18 101 S L15 OR L16  
 L19 92 S L18 NOT L17  
 L20 9 S L19 AND PLANT AND VACCINE

=> s plant(s)virus or plant(s)viral

213514 PLANT  
 77966 VIRUS  
 11198 PLANT(S)VIRUS  
 213514 PLANT  
 68892 VIRAL  
 10042 PLANT(S)VIRAL

L21 15492 PLANT(S)VIRUS OR PLANT(S)VIRAL

=> s l21 and (virus(s)antigen or viral(s)antigen)

77966 VIRUS  
 69311 ANTIGEN  
 15519 VIRUS(S)ANTIGEN  
 68892 VIRAL  
 69311 ANTIGEN  
 11400 VIRAL(S)ANTIGEN

L22 2739 L21 AND (VIRUS(S)ANTIGEN OR VIRAL(S)ANTIGEN)

=> s l22 and transgenic

28844 TRANSGENIC

L23 1699 L22 AND TRANSGENIC

=> s l23 and (animal or human)

205852 ANIMAL  
 404818 HUMAN

L24 1679 L23 AND (ANIMAL OR HUMAN)

=> s l24 and vaccine

21306 VACCINE

L25 1050 L24 AND VACCINE

=> s l25 and tgev

89 TGEV

L26 29 L25 AND TGEV

=> d his

(FILE 'HOME' ENTERED AT 15:45:38 ON 21 SEP 2004)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO' ENTERED AT 15:45:54 ON 21 SEP 2004

L1 851 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
 L2 1713 S (LAM, D? OR LAM D?)/AU  
 L3 15 S L1 AND L2  
 L4 8 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)  
 L5 2549 S L1 OR L2  
 L6 2534 S L5 NOT L3  
 L7 85 S L6 AND PLANT AND VACCINE  
 L8 45 S L7 AND VIR?  
 L9 19 DUPLICATE REMOVE L8 (26 DUPLICATES REMOVED)  
 L10 491 S PLANT(S)VIRUS(S)ANTIGEN  
 L11 480 S L10 NOT L5  
 L12 79 S L11 AND TRANSGENIC  
 L13 35 S L12 AND (HUMAN OR ANIMAL)  
 L14 24 DUPLICATE REMOVE L13 (11 DUPLICATES REMOVED)

FILE 'USPATFULL' ENTERED AT 15:54:07 ON 21 SEP 2004

L15 25 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
 L16 85 S (LAM, D? OR LAM D?)/AU

L17 9 S L16 AND L15  
 L18 101 S L15 OR L16  
 L19 92 S L18 NOT L17  
 L20 9 S L19 AND PLANT AND VACCINE  
 L21 15492 S PLANT(S)VIRUS OR PLANT(S)VIRAL  
 L22 2739 S L21 AND (VIRUS(S)ANTIGEN OR VIRAL(S)ANTIGEN)  
 L23 1699 S L22 AND TRANSGENIC  
 L24 1679 S L23 AND (ANIMAL OR HUMAN)  
 L25 1050 S L24 AND VACCINE  
 L26 29 S L25 AND TGEV

=> s l26 not l18

L27 22 L26 NOT L18

=> d l27 1-10 ti

L27 ANSWER 1 OF 22 USPATFULL on STN

TI Immunization of fish with plant-expressed recombinant proteins

L27 ANSWER 2 OF 22 USPATFULL on STN

TI **Vaccine** for congenital tremors in pigs

L27 ANSWER 3 OF 22 USPATFULL on STN

TI Expression in plants of HIV-related proteins

L27 ANSWER 4 OF 22 USPATFULL on STN

TI Eukaryotic layered vector initiation systems

L27 ANSWER 5 OF 22 USPATFULL on STN

TI Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis

L27 ANSWER 6 OF 22 USPATFULL on STN

TI Eukaryotic layered vector initiation systems

L27 ANSWER 7 OF 22 USPATFULL on STN

TI Commercial production of insulin and insulin-like proteins in plants

L27 ANSWER 8 OF 22 USPATFULL on STN

TI Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis

L27 ANSWER 9 OF 22 USPATFULL on STN

TI Virus coat protein/receptor chimeras and methods of use

L27 ANSWER 10 OF 22 USPATFULL on STN

TI Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis

=> d l27 1,3 bib

L27 ANSWER 1 OF 22 USPATFULL on STN

AN 2004:227056 USPATFULL

TI Immunization of fish with plant-expressed recombinant proteins

IN Bootland, Linda, Crapaud, CANADA

Beifuss, Katherine, Bryan, TX, UNITED STATES

PI US 2004175441 A1 20040909

AI US 2003-733031 A1 20031211 (10)

PRAI US 2002-433381P 20021213 (60)

DT Utility

FS APPLICATION

LREP Patricia A. Sweeney, 1835 Pleasant St., West Des Moines, IA, 50265-2334

CLMN Number of Claims: 23

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)  
LN.CNT 1310

L27 ANSWER 3 OF 22 USPATFULL on STN  
AN 2004:52628 USPATFULL  
TI Expression in plants of HIV-related proteins  
IN Horn, Michael, College Station, TX, UNITED STATES  
Streاتفiled, Stephen, Bryan, TX, UNITED STATES  
Jilka, Joseph, College Station, TX, UNITED STATES  
PI US 2004040061 A1 20040226  
AI US 2003-375657 A1 20030227 (10)  
PRAI US 2002-359969P 20020227 (60)  
DT Utility  
FS APPLICATION  
LREP Patricia A. Sweeney, 1835 Pleasant St., West Des Moines, IA, 50265-2334  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN 10 Drawing Page(s)  
LN.CNT 1342  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l27 11-22 ti

L27 ANSWER 11 OF 22 USPATFULL on STN  
TI Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis

L27 ANSWER 12 OF 22 USPATFULL on STN  
TI Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis

L27 ANSWER 13 OF 22 USPATFULL on STN  
TI Alphavirus structural protein expression cassettes

L27 ANSWER 14 OF 22 USPATFULL on STN  
TI Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis

L27 ANSWER 15 OF 22 USPATFULL on STN  
TI Expression cassetts and methods for delivery of **animal** vaccines

L27 ANSWER 16 OF 22 USPATFULL on STN  
TI Recombinant alphavirus particles

L27 ANSWER 17 OF 22 USPATFULL on STN  
TI Eukaryotic layered vector initiation systems for production of recombinant proteins

L27 ANSWER 18 OF 22 USPATFULL on STN  
TI Method for stimulating an immune response utilizing recombinant alphavirus particles

L27 ANSWER 19 OF 22 USPATFULL on STN  
TI Eukaryotic layered vector initiation systems

L27 ANSWER 20 OF 22 USPATFULL on STN  
TI Alphavirus vector constructs

L27 ANSWER 21 OF 22 USPATFULL on STN  
TI Eukaryotic layered vector initiation systems

L27 ANSWER 22 OF 22 USPATFULL on STN  
TI Alphavirus structural protein expression cassettes



=> d his

(FILE 'HOME' ENTERED AT 15:45:38 ON 21 SEP 2004)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO' ENTERED AT 15:45:54 ON 21 SEP 2004

L1 851 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
L2 1713 S (LAM, D? OR LAM D?)/AU  
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L4 8 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)  
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L9 19 DUPLICATE REMOVE L8 (26 DUPLICATES REMOVED)  
L10 491 S PLANT(S)VIRUS(S)ANTIGEN  
L11 480 S L10 NOT L5  
L12 79 S L11 AND TRANSGENIC  
L13 35 S L12 AND (HUMAN OR ANIMAL)  
L14 24 DUPLICATE REMOVE L13 (11 DUPLICATES REMOVED)

FILE 'USPATFULL' ENTERED AT 15:54:07 ON 21 SEP 2004

L15 25 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
L16 85 S (LAM, D? OR LAM D?)/AU  
L17 9 S L16 AND L15  
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L20 9 S L19 AND PLANT AND VACCINE  
L21 15492 S PLANT(S)VIRUS OR PLANT(S)VIRAL  
L22 2739 S L21 AND (VIRUS(S)ANTIGEN OR VIRAL(S)ANTIGEN)  
L23 1699 S L22 AND TRANSGENIC  
L24 1679 S L23 AND (ANIMAL OR HUMAN)  
L25 1050 S L24 AND VACCINE  
L26 29 S L25 AND TGEV  
L27 22 S L26 NOT L18

=> file medline, agricola, caba, caplus, biosis, biotechno		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	28.65	105.82

FILE 'MEDLINE' ENTERED AT 16:00:57 ON 21 SEP 2004

FILE 'AGRICOLA' ENTERED AT 16:00:57 ON 21 SEP 2004

FILE 'CABA' ENTERED AT 16:00:57 ON 21 SEP 2004  
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FILE 'CAPLUS' ENTERED AT 16:00:57 ON 21 SEP 2004  
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FILE 'BIOTECHNO' ENTERED AT 16:00:57 ON 21 SEP 2004  
COPYRIGHT (C) 2004 Elsevier Science B.V., Amsterdam. All rights reserved.

=> s tgev and plant  
L28 19 TGEV AND PLANT

=> duplicate remove l28

DUPLICATE PREFERENCE IS 'MEDLINE, CABA, CAPLUS, BIOSIS, BIOTECHNO'  
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n  
PROCESSING COMPLETED FOR L28

L29 8 DUPLICATE REMOVE L28 (11 DUPLICATES REMOVED)

=> d l29 1-8 ti

L29 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

TI Use of promoter from bifunctional  $\alpha$ -amylase/subtilisin inhibitor gene (BASI) to direct expression in the transgenic **plant** seed maternal tissue, especially the pericarp

L29 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

TI An oral vaccine in maize protects against transmissible gastroenteritis virus in swine

L29 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

TI Use of arabinogalactan protein fusion constructs in expressing proteins or peptides of pharmaceutical interest in transgenic plants

L29 ANSWER 4 OF 8 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 1

TI Development of oral vaccine in plants against transmissible gastroenteritis virus of swine  
Science Update.

L29 ANSWER 5 OF 8 MEDLINE on STN DUPLICATE 2

TI Immunogenicity of porcine transmissible gastroenteritis virus spike protein expressed in plants.

L29 ANSWER 6 OF 8 MEDLINE on STN DUPLICATE 3

TI Oral immunogenicity of the **plant** derived spike protein from swine-transmissible gastroenteritis coronavirus.

L29 ANSWER 7 OF 8 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 4

TI Expression of immunogenic glycoprotein S polypeptides from transmissible gastroenteritis coronavirus in transgenic plants.

L29 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

TI Antigen gene expression cassettes in **plant** cells, animal vaccine delivery, and vaccines against mucosal disease

=> d l29 1-8 bib

L29 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:355090 CAPLUS

DN 140:369915

TI Use of promoter from bifunctional  $\alpha$ -amylase/subtilisin inhibitor gene (BASI) to direct expression in the transgenic **plant** seed maternal tissue, especially the pericarp

IN Furtado, Angelo; Henry, Robert James

PA Molecular Plant Breeding Nominees Ltd., Australia; Grains Research and Development Corporation

SO PCT Int. Appl., 169 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004035790	A1	20040429	WO 2003-AU1381	20031017
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,			

OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ,  
 BY, KG, KZ, MD  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
 GW, ML, MR, NE, SN, TD, TG

PRAI AU 2002-952143 A 20021017

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2003:279086 CAPLUS  
 DN 139:328049  
 TI An oral vaccine in maize protects against transmissible gastroenteritis  
 virus in swine  
 AU Jilka, J.  
 CS Prodigene Inc., College Station, TX, 77845, USA  
 SO Molecular Farming of Plants and Animals for Human and Veterinary Medicine  
 (2002), 223-236. Editor(s): Erickson, L. Publisher: Kluwer Academic  
 Publishers, Dordrecht, Neth.  
 CODEN: 69DSQK; ISBN: 1-4020-0835-X  
 DT Conference  
 LA English  
 RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:168161 CAPLUS  
 DN 134:218000  
 TI Use of arabinogalactan protein fusion constructs in expressing proteins or  
 peptides of pharmaceutical interest in transgenic plants  
 IN Bailey, Andrea; Yu, Wenjin; Tuboly, Tamas; Nagy, Eva; Erickson, Larry  
 PA University of Guelph, Can.  
 SO PCT Int. Appl., 49 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001016339	A1	20010308	WO 2000-CA977	20000825
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRAI US 1999-151147P P 19990827

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 4 OF 8 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 1  
 AN 2001:68073 CABA  
 DN 20013054771  
 TI Development of oral vaccine in plants against transmissible  
 gastroenteritis virus of swine  
 Science Update  
 AU Tuboly, T.; Yu, W.; Bailey, A.; Erickson, L.; Nagy, E.; Toutant, J. P.  
 [EDITOR]; Balazs, E. [EDITOR]  
 CS Veterinary Medical Research Institute of the Hungarian Academy of  
 Sciences, 1581 Budapest POB 18, Hungary.

SO Molecular farming. Proceedings of the OECD Workshop held in La Grande Motte, France, 3-6 September, 2000, (2001) pp. 239-248. 19 ref.  
Publisher: Institut National de la Recherche Agronomique. Paris  
Price: Book chapter; Conference paper .  
Meeting Info.: Molecular farming. Proceedings of the OECD Workshop held in La Grande Motte, France, 3-6 September, 2000.  
ISBN: 2-7380-0953-0  
CY France  
DT Journal  
LA English  
ED Entered STN: 20010706  
Last Updated on STN: 20010706

L29 ANSWER 5 OF 8 MEDLINE on STN DUPLICATE 2  
AN 2000173780 MEDLINE  
DN PubMed ID: 10706964  
TI Immunogenicity of porcine transmissible gastroenteritis virus spike protein expressed in plants.  
AU Tuboly T; Yu W; Bailey A; Degrandis S; Du S; Erickson L; Nagy E  
CS Department of Pathobiology, University of Guelph, Guelph, Canada.  
SO Vaccine, (2000 Apr 3) 18 (19) 2023-8.  
Journal code: 8406899. ISSN: 0264-410X.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200005  
ED Entered STN: 20000518  
Last Updated on STN: 20000518  
Entered Medline: 20000508

L29 ANSWER 6 OF 8 MEDLINE on STN DUPLICATE 3  
AN 2000449498 MEDLINE  
DN PubMed ID: 11003480  
TI Oral immunogenicity of the **plant** derived spike protein from swine-transmissible gastroenteritis coronavirus.  
AU Gomez N; Wigdorovitz A; Castanon S; Gil F; Ordas R; Borca M V; Escribano J M  
CS Departamento de Mejora Genetica y Biotecnologi INIA, Madrid, Spain.  
SO Archives of virology, (2000) 145 (8) 1725-32.  
Journal code: 7506870. ISSN: 0304-8608.  
CY Austria  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200010  
ED Entered STN: 20001012  
Last Updated on STN: 20001012  
Entered Medline: 20001005

L29 ANSWER 7 OF 8 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 4  
AN 1999:32334 CABA  
DN 19991601635  
TI Expression of immunogenic glycoprotein S polypeptides from transmissible gastroenteritis coronavirus in transgenic plants  
AU Gomez, N.; Carrillo, C.; Salinas, J.; Parra, F.; Borca, M. V.; Escribano, J. M.  
CS Centro de Investigacion en Sanidad Animal (CISA-INIA), Valdeolmos, 28130 Madrid, Spain.  
SO Virology (New York), (1998) Vol. 249, No. 2, pp. 352-358. 27 ref.  
ISSN: 0042-6822  
DT Journal  
LA English  
ED Entered STN: 19990310  
Last Updated on STN: 19990310

L29 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1997:310007 CAPLUS  
 DN 126:273267  
 TI Antigen gene expression cassettes in **plant** cells, animal vaccine  
 delivery, and vaccines against mucosal disease  
 IN Howard, John A.; All, Benjamin P.  
 PA Howard, John A., USA  
 SO PCT Int. Appl., 50 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9710347	A1	19970320	WO 1996-US14662	19960913
	W: AU, CA, JP, NZ				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2232023	AA	19970320	CA 1996-2232023	19960913
	AU 9669762	A1	19970401	AU 1996-69762	19960913
	US 2002058312	A1	20020516	US 2001-797097	20010301
PRAI	US 1995-529006	A	19950915		
	WO 1996-US14662	W	19960913		

=> d his

(FILE 'HOME' ENTERED AT 15:45:38 ON 21 SEP 2004)

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO' ENTERED AT 15:45:54 ON 21 SEP 2004

L1 851 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
 L2 1713 S (LAM, D? OR LAM D?)/AU  
 L3 15 S L1 AND L2  
 L4 8 DUPLICATE REMOVE L3 (7 DUPLICATES REMOVED)  
 L5 2549 S L1 OR L2  
 L6 2534 S L5 NOT L3  
 L7 85 S L6 AND PLANT AND VACCINE  
 L8 45 S L7 AND VIR?  
 L9 19 DUPLICATE REMOVE L8 (26 DUPLICATES REMOVED)  
 L10 491 S PLANT(S)VIRUS(S)ANTIGEN  
 L11 480 S L10 NOT L5  
 L12 79 S L11 AND TRANSGENIC  
 L13 35 S L12 AND (HUMAN OR ANIMAL)  
 L14 24 DUPLICATE REMOVE L13 (11 DUPLICATES REMOVED)

FILE 'USPATFULL' ENTERED AT 15:54:07 ON 21 SEP 2004

L15 25 S (ARNTZEN, C? OR ARNTZEN C?)/AU  
 L16 85 S (LAM, D? OR LAM D?)/AU  
 L17 9 S L16 AND L15  
 L18 101 S L15 OR L16  
 L19 92 S L18 NOT L17  
 L20 9 S L19 AND PLANT AND VACCINE  
 L21 15492 S PLANT(S)VIRUS OR PLANT(S)VIRAL  
 L22 2739 S L21 AND (VIRUS(S)ANTIGEN OR VIRAL(S)ANTIGEN)  
 L23 1699 S L22 AND TRANSGENIC  
 L24 1679 S L23 AND (ANIMAL OR HUMAN)  
 L25 1050 S L24 AND VACCINE  
 L26 29 S L25 AND TGEV  
 L27 22 S L26 NOT L18

FILE 'MEDLINE, AGRICOLA, CABA, CAPLUS, BIOSIS, BIOTECHNO' ENTERED AT 16:00:57 ON 21 SEP 2004

L28 19 S TGEV AND PLANT  
 L29 8 DUPLICATE REMOVE L28 (11 DUPLICATES REMOVED)

=> logoff

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

15.36

121.18

STN INTERNATIONAL LOGOFF AT 16:02:03 ON 21 SEP 2004